

e:cue



TRAXON | e:cue
MEMBER OF PROSPERITY GROUP



AM477420038

e:cue LIGHTDRIVE+ WiFi



Installation Guide

Read the Installation Guide and the Safety Instructions carefully. Subject to modification without prior notice. Typographical and other errors do not justify any claim for damages. Modification of the product is prohibited.

This document is designed for electricians and system administrators of the product.

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Downloads and more information at:
www.ecue.com

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1 Safety instructions

Read the safety instructions, provided in a separate manual, carefully. Make sure that the environmental, mounting, and installation prerequisites are met. This manual should be kept at a safe place and in reach of the device.

1.1 Symbols



The exclamation mark warns about possible damage of the device itself, to connected devices, and to the user.



The information symbol gives general hints and informs about handling and procedures for use of the device.

1.2 General instructions



- The Ethernet port of the LIGHTDRIVE+ WiFi is not designed for inter-building connections. Use the LIGHTDRIVE+ WiFi only with intra-building networks.



- If safety instructions are missing, please contact Traxon e:cue to receive a new copy.

2 General remarks

2.1 Transport

Only transport the device in its original packaging. This protects the device from damage.

2.2 Unpacking

Only unpack the e:cue LIGHTDRIVE+ WiFi at its installation location. To protect the device against condensation water, unpack it and wait until all moisture remaining in the device has evaporated. Condensation can occur when the device is moved from a cold to a warm location. Keep the packaging for use in case of further transport. Inspect all parts for completeness regarding chapter „3.1 Delivery content“ on page 05. If there is apparent damage to the device or parts are missing from the delivery scope, please contact the Traxon e:cue Support service.

2.3 Warranty regulations

Depending on the product, warranty regulations are of different duration. The warranty time is usually noted in the quote and in the order confirmation. See www.traxon-ecue.com/terms-and-conditions for details. Legal warranty regulations apply in any case.

2.4 Maintenance and Repair

This device requires no maintenance.



- Before dismounting, appropriate measures must be taken to protect the respective components against damage caused by electrostatic discharge (ESD protection).
- Do not try to repair the device. Return it to your Traxon e:cue distributor for replacement or repair.

2.5 Disposal



Batteries and technical appliances must not be disposed of with domestic waste, but should be handed in at the appropriate collection and disposal points.

The proper disposal of packing materials and of the device is the responsibility of the respective user and for his account; in all other matters, the retrieval obligation for packing materials and the device is subject to the statutory regulations.

2.6 Support

In case of technical problems or questions regarding installation and repair please contact:

Traxon Technologies Europe GmbH
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 Karl-Schurz-Str. 38
 33100 Paderborn, Germany
 +49 (5251) 54648-0
 support@ecue.com

2.7 Further information

For further product information, such as the configuration guide and the onboarding guide, check www.traxon-ecue.com.

3 General device description

LIGHTDRIVE+ WiFi fuses dynamic lighting control with a sophisticated design. The wall-mounted user terminal is able to output various scenes and effects in different zones which are set-up via the LIGHTDRIVE+ app. No matter what kind of location you have in mind: bars and restaurants, shops and malls, museums, reception areas ... For any purpose of any scale, be it small or mid-size, LIGHTDRIVE+ WiFi is the easy and straightforward solution for lighting control. The user terminal serves as a standalone DMX512 controller. The focal point of user interaction is the so called Jog Wheel. With this control knob, scenes, zones and effects, such as speed and brightness, can be adjusted in a blink of an eye. The user terminal itself shows a clear and minimalistic design with a high quality glass front panel. LIGHTDRIVE+ WiFi is compatible with all monochrome, dynamic white, RGB und RGBW LED fixtures.

Main features:

- State-of-the-art user interface with elegant appearance
- Set-up via LIGHTDRIVE+ app
- For monochrome, dynamic white, RGB and RGBW LED fixtures
- Two DMX outputs, divided in 3 zones
- 8 scenes in each of the 3 predefined zones
- Pre-defined FX effects
- Integrated scheduler for time trigger
- Integrated proximity sensor
- 2 low-side switches and 2 dry inputs for integration into 3rd party systems

3.1 Delivery content

Delivery content for the e:cue LIGHTDRIVE+ WiFi (AM477420038):

1. e:cue LIGHTDRIVE+ WiFi
2. Device plugs
3. Safety instructions
4. Welcome card

3.2 Optional accessories

- Power Supply 15W 12V DIN rail (AM3137600HA)

4 Product specifications

Dimensions (W x H x D)	80 x 160 x 30 mm / 3.15 x 6.30 x 1.18 inch
Weight	188 g / 0.41 lb
Power supply	PoE IEEE 802.3af, polarity- independent or 12 V DC SELV
Power consumption	typ. 4.5 W, max. 6 W (all LEDs 100 % white), on device plug
Operating temperature	0 ... 35 °C / 32 ... 95 °F
Storage temperature	0 ... 50 °C / 32 ... 122 °F
Op. / storage humidity	0 ... 80% RH, non-condensing
Protection class	IP20
Installation	Indoor installation only, Intra building connections only
Electrical safety class	SELV
Housing	PC/ABS, glass
Mounting	Wall mount housing, suitable for most international in-wall mounted boxes
Certificates	CE, ETL, FCC, UKCA
Real time clock	with capacitor backup, holds time for ~1 h

Interface specifications

User interfaces (UI)	12 x capacitive touch key 1 x jog wheel with switch
System interfaces	3 x DIP switch 1 x Ethernet 10/100 Mbit/s, on device plug, max. cable length: 65 m, for synchronization of multiple devices only 1 x USB 2.0 micro USB-B, for update only
DMX outputs	2 x DMX512, on device plug
Fixture types	Monochrome (1 channel) Dynamic White (2 channels) RGB (3 channels) RGBW (4 channels)
Low-side switches	2 x 24 V DC, max. 3 A, ON resistance 50 mΩ, normally open, galvanically isolated, overload protected, on device plug



Digital dry contacts	2 x inputs, 5 V DC contact supply, on device plug, Input high threshold voltage: $V_{IHmin} = 2.5 \text{ V}$ Input low threshold voltage: $V_{ILmax} = 1.2 \text{ V}$ Typ. input threshold voltage: $V_{SW(typ)} = 1.5 \text{ V}$ Input voltage max.: $V_{INmax} = 15 \text{ V}$
Digital inputs supply	For dry contacts Use 5 V DC from device (pin 7) $V_{SUP} = 5 \text{ V DC}$ max. 15 mA Typ. current when sourcing all 2 ports: $I_{typ} = 12 \text{ mA}$
Device plugs	Push-in spring connection plug, Stripping length: 6 mm Major diameter of isolated cable max. 2 mm Cable cross-section: solid: 0.14 ... 0.5 mm ² flexible: 0.2 ... 0.5 mm ²
WiFi	RF frequencies: 2.4 ... 2.473 GHz, IEEE 802.11 b/g/n
Sensors	Proximity sensors for UI activation

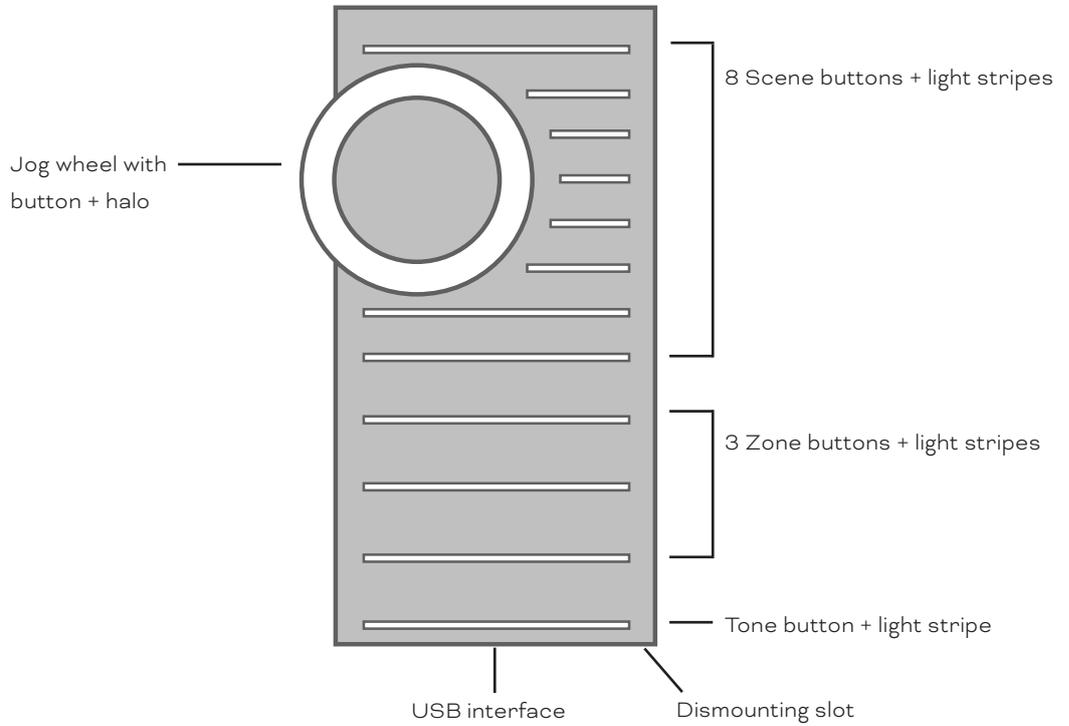


5 Connectors and interfaces

LIGHTDRIVE+ WiFi controller

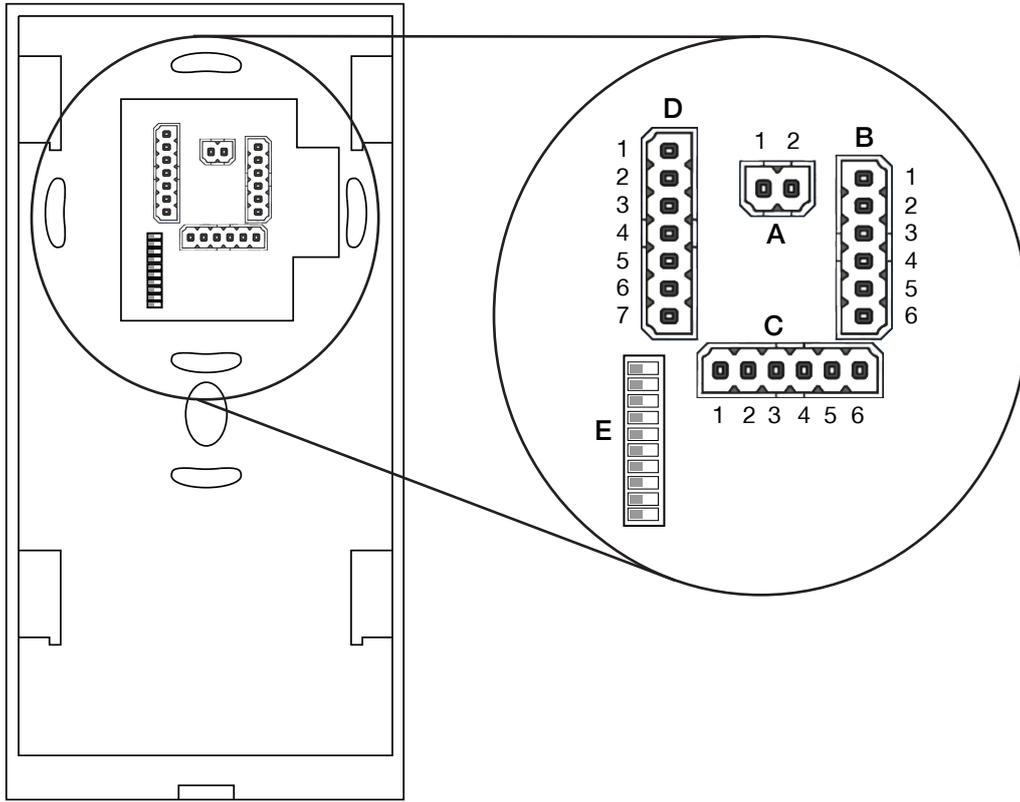


5.1 User & USB interfaces



5.2 Connections

Rear view:



A Power supply

- 1 Power In +
- 2 Power In -

B DMX outputs

- 1 DMX 2 GND
- 2 DMX 2+
- 3 DMX 2-
- 4 DMX 1 GND
- 5 DMX 1+
- 6 DMX 1-

C PoE & Ethernet

- 1 PoE supply DC
- 2 PoE supply DC
- 3 Ethernet Rx-
- 4 Ethernet Rx+
- 5 Ethernet Tx-
- 6 Ethernet Tx+

E DIP switches

see "6 DIP switches" (page 08)

D Low-side switches & Digital dry contacts

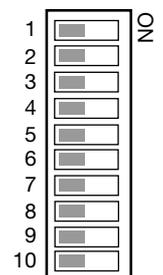
- 1 Switch 1 GND
- 2 Switch 1
- 3 Switch 2
- 4 Switch 2 GND
- 5 Digital Input 1
- 6 Digital Input 2
- 7 Digital Power Out 5 V DC

6 DIP switches

The DIP switches define the configuration. The DIP switches are only read when the LIGHTDRIVE+ WiFi is powered up. After changing the switch settings, the LIGHTDRIVE+ must be restarted: Press 10 x Tone button and then 1 x Scene 1 button. Alternatively power down and up again the device. (0 = OFF position, 1 = ON position)

E DIP switches

- 1... 7 no function



- E** **DIP switches**
- 8 Enable / Disable Tone button
0 = Tone button disabled
1 = Tone button enabled
- 9 Control all Zones via Zone A
0 = disabled
1 = enabled
- 10 Overwrite Scenes
0 = Scenes can not be overwritten using the user interface
1 = Scenes can be overwritten using the user interface (“Saving scenes”)

6.1 Control all Zones via Zone A

Is DIP switch 9 enabled, you can control the Scene selection (including brightness levels) of all Zones at once via Zone A with the following characteristics:

- Is Zone A selected, Scene control in this Zone is also valid for B and C. Example: Select for Zone A the Scene 2 → Zone B and Zone C will also each play their Scenes 2. Low-side switch settings are only used as defined for Zone A, low-side switch settings for Zones B and C are ignored.
- Are Zone B or C selected, all control works as defined, including low-side switch settings. You have separate control for the current Zone.

7 Power supply

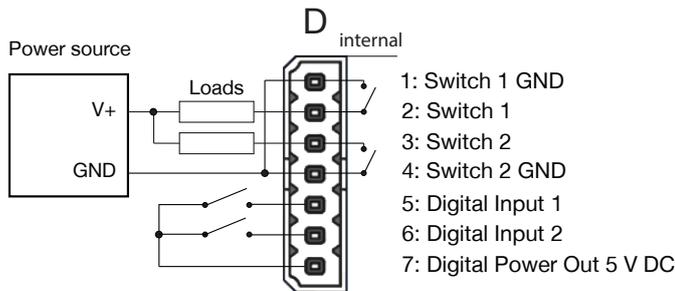
The LIGHTDRIVE+ WiFi can be powered in three different ways:

- by a 12 V DC external power supply at the connections A 1 and A 2.
- via standard Power-over-Ethernet (PoE) at connections C 1 und C 2.
- via the USB interface. This is only recommended when updating the firmware of the device and no external power supply is available. Not allowed for permanent operation.

 When powering via the USB interface, the LIGHTDRIVE+ WiFi requires up to 500 mA supply current from the USB interface (USB 2.0). Ensure that the power source can provide this current.

8 Low-side switches & Digital dry contacts

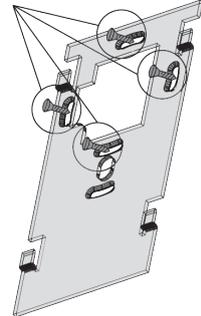
Wiring example:



9 Mounting

The LIGHTDRIVE+ WiFi can be mounted in most standard in-wall mounted boxes (DE, US, UK, JP etc.). It is recommended to install it in a double-box to have more room for the cabling. Mount the device after all connections are done.

1. Mount the base plate for the LIGHTDRIVE+ WiFi with screws on the in-wall mounted boxes, recess to the top. Use a spirit level to ensure proper positioning. Use as many of the appropriate fixing holes of the base plate as possible.



2. Make all required connections to the LIGHTDRIVE+ WiFi. Keep the shielding and twisting of the Ethernet wires as long as possible to ensure proper Ethernet connections.
3. Place the LIGHTDRIVE+ WiFi on the base plate so all four noses of the base plate  rest in the four holes of the LIGHTDRIVE+ WiFi.

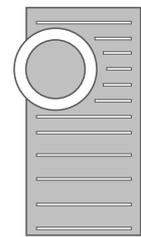


4. Shift down the LIGHTDRIVE+ WiFi until the locker latches with a small click.

 Do not over-tighten the mounting screws for the base plate. This may damage the holes for the screws or the base plate gets twisted.

10 Dismounting

To dismount the LIGHTDRIVE+ WiFi, insert a narrow screw driver into the dismounting slot in the bottom right side to unlock the latch. Shift the LIGHTDRIVE+ WiFi slightly up until it gets fully released.



Dismounting slot



11 Certifications



Conforms to ANSI/UL Std. 62368-1
 Certified to CSA Std. C22.2 NO. 62368-1



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

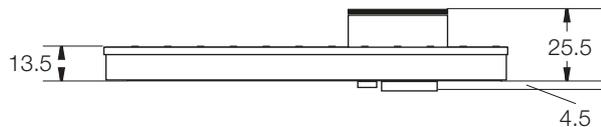
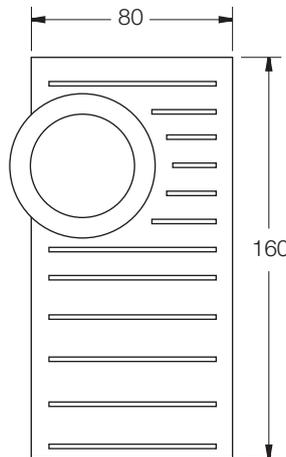
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

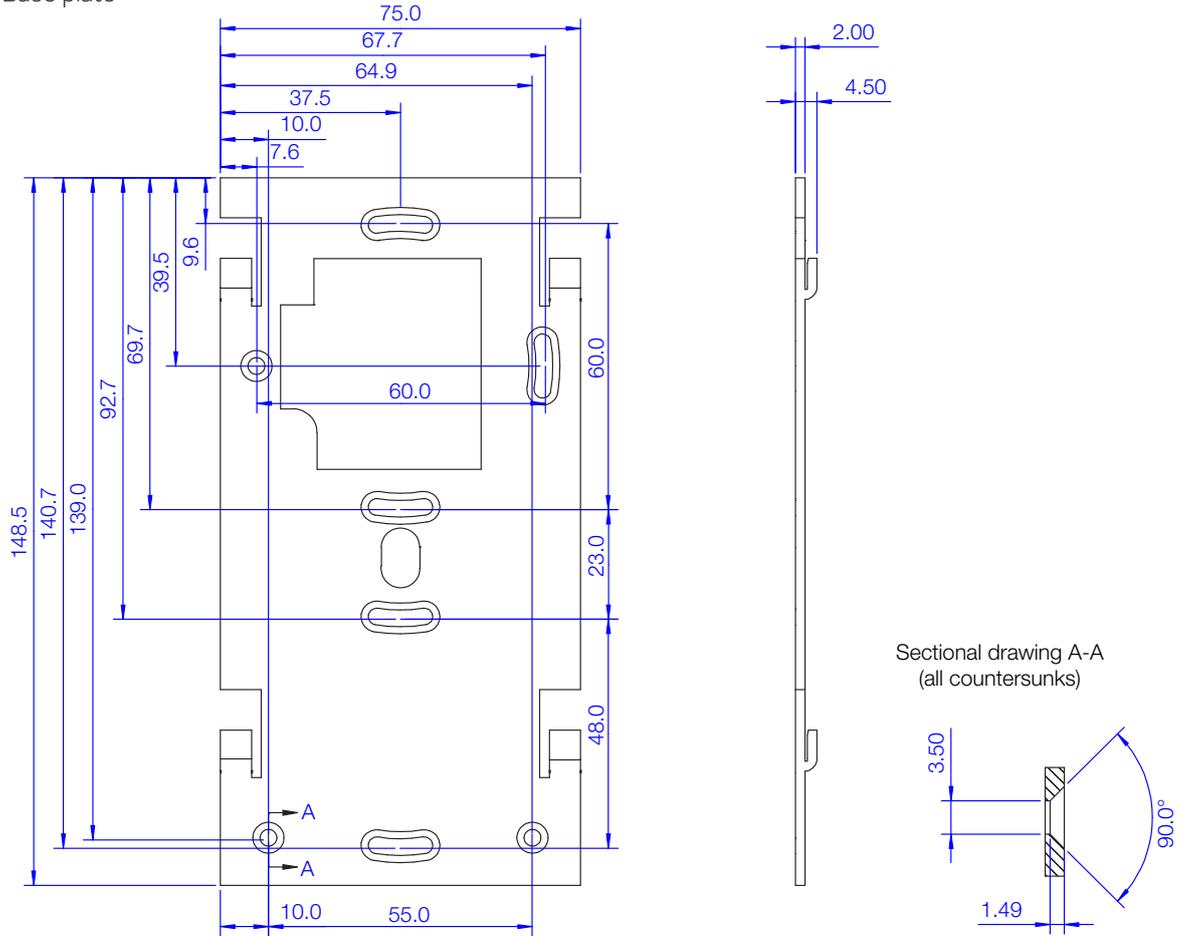
12 Dimensions

All dimensions in mm

Controller



Base plate



13 Further guides

Onboarding Guide:



[Link to PDF](#)

Configuration Guide:



[Link to PDF](#)

14 Trouble shooting

No function of the device.

Check the power supply and that 12 V DC are available. Check the polarity of the power supply.

Device starts up, but hangs and has no function.

Contact the e:cue support.

Device works, but the connected fixtures do not react.

Check correct polarity of the DMX connection. Check the correct assignment of the DMX Zones with the LIGHTDRIVE+ app.

The Tone button does not work.

Check if using the Tone button is allowed with the DIP switch no. 8 on the backside.

Can I repair the device myself?

No. Do not try to repair the device. Return it to your e:cue distributor for replacement or repair.

15 FAQ

Is it possible to use more than one LIGHTDRIVE+ WiFi?

Yes. You can integrate multiple LIGHTDRIVE+ WiFi in your installation. When you want to synchronize their activity, use Ethernet cables at the Ethernet connections (C 3 to C 6) and make sure all network settings are coordinated.

How can I supply power to the LIGHTDRIVE+ WiFi?

You have two options: **a)** use an external power supply unit at the Power Supply input (connections A 1 and A 2), or **b)** use PoE at the connections C 1 and C 2.

What is the voltage for powering the LIGHTDRIVE+ WiFi?

The voltage is 12 V DC.

Can I use the LIGHTDRIVE+ WiFi to power the fixtures?

No, this is not possible. But you can use one power supply unit for both.

